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Indian Standard

## GUIDELINES FOR METAL PLATES FOR OFFSET MACHINE

- 1. Scope Lays down the guidelines for metal plates for offset machines.
- 2. Dimensions The thickness of the plates shall be as given below:

Nominal Size (mm)	Thickness (mm)
Up to and including 500 × 625	0·3 to 0·4
Above 500 × 625	0·5 to 0·7

- 3. Material The metal plates shall be manufactured from litho-quality aluminium coils and sheets.
- 4. Requirements The surface of the plate shall be grained to be achieved either by marbles or anodized electro-micro grain. A well-grained plate shall have a dull uniformly matt surface free from sling spot and scratches and shall have no abrasive particles embedded in it.

#### 5. Tests

#### 5.1 Performance Tests

- a) Exposure tests to determine resolution and latitude,
- b) Development tests to determine consistency and latitude,
- c) Deletion tests to determine anti-scum properties of the non-image areas,
- d) Run-length tests to determine durability on the press,
- e) Ink-water balance tests to determine hydrophillic properties of non-image areas and ink-receptive properties of the image areas,
- f) Press-solvent resistance tests to determine ability of the plate to withstand various types of press solvents, and
- g) Edge-cracking tests to determine tensile strength and elasticity of the plate on the press especially web presses.

### EXPLANATORY NOTE

The details of the performance test, since not available at present, will be included later on, in consultation with the industry. This standard is based on information received from Defence Scientific Information Documentation Centre, Research and Development Organization, Ministry of Defence, Government of India.

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